THE

PROPOSED NATIONAL PARK

IN

Southern Everglades of Florida

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THE PROPOSED NATIONAL PARK IN SOUTHERN EVERGLADES OF FLORIDA

BY DAVID FAIRCHILD

Dr. David Fairchild of the United States Department of Agriculture, internationally recognized botanist, delivered this address at the annual meeting of the American Forestry Association, February 28, 1929:

The more I have thought about the matter the more I have wondered just why I am here today to present the claims of the southern Everglades of Florida as a suitable area on which to place a national park. This is an Association of Foresters and the area of which I am to speak is not ever likely to be interesting as a commercial forest. It is a vast expanse of grass land cut into a hundred fragments and diversified by oases of scrubby trees called hammocks and waterways whose shores in part are covered with impenetrable jungles of mangrove and in part are sandy beaches strewn with cocoanut palms.

I have known this region from visits to its fringes for a good many years and it has taken me some time to realize that the misconception regarding the southern Everglades which I had when in 1898 I traveled to Miami with James Ingraham, the first white man to cross them, still persists in the minds of most northern people. I can remember with what surprise I heard from Mr. Ingraham's lips a description of the region which did not tally in any particular with my boyish fancy of the mysterious Everglades. I suspect that this illusion regarding the vast stretches of country in the southern Everglades was still in the mind of the president of your association when he asked me to present their claims to an audience of foresters.

However, since you are a most influential body of men and have a wide influence upon the opinion of the public I feel that it is a duty to present to you as clearly as I can the case of the Everglade National Park proposal.

Before I go into the details of the matter may I be permitted to sketch in a brief way the growth of the appreciation of natural scenery by civilized man and apply this to the subject of this paper.

When I first visited Europe in the nineties almost every traveler made a direct line for the Alps and the ship talk was largely as to whether you were going to visit them or not, so great had become the fame of their

beetling crags and snow capped peaks and dark mysterious valleys.

This appreciation of the Alps came very gradually into the life of the European. The great poet Wordsworth in that exquisite book which he wrote describing the incomparable lake region of England, his Guide to the Lakes, published over a century ago, describes how even the Scottish poet Burns in his poem, The Traveler, pictures the Swiss as loving their mountain homes, not by reason of the romantic beauty of the situation, but in spite of the miserable character of the soil, and the stormy horrors of their mountain steeps.

> "No vernal blooms their torpid rocks array
> But winter lingering chills the lap of May;
> No zephyr fondly sues the mountain's breast,
> But meteors glare and stormy glooms invest.
> Yet still, even here, content can spread a charm,
> Redress the clime, and all its rage disarm."

Quotes Wordsworth

Wordsworth, in his almost pathetic appeal to the public to prevent a proposed railroad from ruining the landscapes that he loved so well, announces his conviction in words which sound today like the pronouncement of a super soul that knew what he was saying just as Newton knew what he was talking about when he told his friend Halley that the orbit of a planet must be an ellipse. Let me quote Wordsworth's own words: "A vivid perception of romantic scenery is neither inherent in mankind, nor a necessary consequence of even a comprehensive education. It is benignly ordained that green fields, clear blue skies, running streams of pure water, rich groves and woods, orchards, and all the ordinary varieties of rural nature, should find an easy way to the affections of all men, and more or less so from early childhood till the senses are impaired by old age and the sources of mere earthly enjoyment have in a great measure failed. But a taste beyond this, however desirable it may be that every one should possess it, is not to be implanted at once: It must be gradually developed both in nations and individuals."

I feel today as I stand here to plead for the broad sweeps of saw grass of the Everglades and the weird mysterious tangle of roots and trunks that make the mangrove swamps of the Cape Sable region, that these im-

mortal words of Wordsworth have a direct application. To appreciate the beauty of the Everglades one must have seen them as Wordsworth saw the wild tarns and woodlands of Windermere and Ullswater—the lake region which he discovered but which has since become one of the most noted regions for its beauty in the whole world.

There will be those who speed through the Everglades and see nothing that appeals to them, just as the then famous Bishop Burnet described the gorgeously beautiful Alps after having crossed them as "those mountains of which the very sight is enough to fill a man with horror."

The Everglades of South Florida have a strange and to me appealing beauty. Their charm partakes of the charm of the Pacific Islands. Their shell beaches remind me, with their groves of cocoanut palms, of beaches in Samoa and the Fiji Islands and Amboina and the other islands in the Java sea that I have visited. I cannot tread them without saying over to myself those words of the Indian poet Tagore, "On the seashores of endless worlds, children play." They differ from other beaches I know because, back of the strand, instead of there being mountains which shut one in, there are the vast level prairies which like the sea in front of one stretch away to the horizon behind one. You are between a sea of water and a sea of land.

Dotting the perfectly level plains there are the fascinating hammocks.

In no other tropical region of the world have I seen anything like these hammocks. The nearest approach to them I encountered on the so-called Winneba Plains of the African Gold Coast. These were enough like them to remind me strongly of the Southern Everglades, although they lacked much of the beauty that characterizes the hammocks of Florida.

In the dripping rain forest areas of the tropics one is bewildered by the density of the lianas and the impenetrability of the forest vegetation. One can penetrate the jungle with difficulty and one cannot see far into it.

Hammocks Like Oases

The hammocks, standing out alone on the plains of saw grass, are like oases in the Sahara. They have something of the same charm that oases have. One wanders from one hammock to the other, explores it from all sides, and in a few seconds enters its wealth of low-growing

trees covered with tropical orchids and those almost as beautiful bromeliads. There is an almost endless series of these hammocks. It is the grouping of these low rounded masses of vegetation scattered fortuitously over the level plain that make the Everglades. They always remind me of great oaks scattered over a level landscape as one sees them in England, though the comparison is somewhat far-fetched.

When these hammocks come down to the water's edge they merge into those strangest of all the plant associations of the world—the Mangrove Swamps.

I say strangest, for my memory goes back to the first descriptions that I ever read of the tropical plant life of the great Malay Archipelago. The noted bontanist Haberland made in the early nineties a trip to Java and wrote up his impressions in a book that had a tremendous sale in European countries. He called it Eine Botanische Tropenreise. His chapter eleven, on the Mangrove, I read as a student in Bonn with great eagerness. In it he remarks that "the vegetation of the Mangrove belongs to the most remarkable of all the plant associations which the tropical world has to present." I went to Java and saw the mangroves there. I visited Siam and Ceylon and traveled out to New Guinea. I have been twice on the coast of Sumatra and I have coasted along the islands of the Fiji and Samoa and the Hawaiian groups, but nowhere have I seen such magnificent mangrove vegetation as that which characterizes the Southern Everglades of Florida. Some years ago there visited me in Miami a noted Japanese botanist from the Liu Chu Islands off Formosa. He had been all over the Oriental tropics, and when I took him into some of our Mangrove swamps here he literally gasped, for he had never seen anything approaching the tall sixty and eighty feet avicennia trees that made up a part of the mangrove vegetation on Biscayne Key—now a thing of the past. In the island of Ceram, one of the least frequented islands on the Java Sea, I once photographed the buttressed trunks of a mangrove tree, and it was later published in the Journal of Heredity and attracted so much attention that it was copied in the Literary Digest. When I got back to Florida I found hundreds of trees more remarkable than the one I had photographed in Ceram. The West Indian species of mangrove, rhizophora mangle, appears to attain on this coast a greater stature than the rhizophora mucronata on the seashores of the Orient.

Orchids have formed one of the commonest lures of the tropics and no picture of them is complete without these gorgeous epiphytes with their wonderful often fragrant flowers. I once collected Vandas in the mountains of Java and with them decorated a house for Christmas. I botanized with the great orchid collector Andre in the coastal plains of Columbia. I have just returned from the table lands of North Sumatra, but nowhere in all my experience have I seen greater numbers of orchids, or more magnificent specimens, than abound in the hammocks of Southern Florida. I was guilty once of dragging some fine specimens from the Everglades and fastening them to live oaks in my own little hammock and today there are seventeen flower stalks four feet long rising from three specimens of Oncidium luridum. So beautiful are these orchids and so near to the dooryards of a hundred thousand people that if something is not done soon they will be largely stripped from the hammock trees and perish from neglect in the private yards of careless citizens.

There is nothing more characteristic of tropical vegetation than the abundance of lianas—great climbing vines that cover the tops of the forest trees. These are abundantly represented in the mangrove and hammock vegetation of the lower Everglades. No one can venture into these hammocks without becoming aware of the existence of these lianas, which in the dripping rain forests of the tropics make travel almost impossible through them. Let any young botanist, for the first time, make the acquaintance of the Knicker Bean (Guilandina crista), with its steel-hard recurved spines and he will appreciate, as he could not possibly otherwise, the liana vegetation which is the plague of tropical agriculturists. The epyphytic strangler fig (Ficus aurea), which forms one of the most striking features of the jungle anywhere that it or its relatives with similar habit occur, is seen to perfection in the hammocks of South Florida. I have never seen finer example anywhere of the complete destruction of century old oaks by the strangling action of these ficus species than here in South Florida, and they are startling to any keen observer who has only known trees in northern latitudes. As Haberland remarked in his Tropen Reise, the idea of the northerner is that the roots of the tree are simply for the purpose of fastening the tree to the ground and affording a supply of moisture for the leaves. These strangler figs show that roots can become twining strangling organs and the

upright growing roots which cover the ground around any Black mangrove tree show that roots may serve as breathing organs just as well as the leaves.

Two General Types

There are two general types of palms, both of which belong to the handsomest of all natural objects—the cluster palms, composed of incomparably beautiful slender stems, sometimes forty feet high, crowned with feathery plumes of delicate waving fronds, and the single stemmed palms, which, like the cocoanut and the Royal palm, raise a hundred feet into the air magnificent masses of leaves, each leaf of which mass is so enormous that should it fall and strike you it would kill you as likely as if a mason had dropped his hod of brick upon your head.

"I once took that veteran tree man, Prof. Charles Sprague Sargent of the Arnold Arboretum, out under some forty-year-old cocoanut palms in South Florida and he stood there for minutes with his hands behind his back and then remarked: 'Fairchild, after all, it is the most beautiful of all trees.' This from a man who was undoubtedly the best informed man on trees, who has ever lived, I consider substantial praise.

"In the area which we propose shall be used for a national park there are growing the Paurotis wrightii, a supberb cluster palm, the Roystonea or Oreodoxya regia, famed as one of the most remarkable of all the palms, and the Cocos nucifera, or cocoanut palm, which carries with it more of the romance of the Pacific island civilization than any other plant. Take it away from the landscapes of the Pacific and you have robbed them of their most precious possession. These three palms are as wild in this region as anywhere in the world. They have become parts of its landscape. But besides these there are the thatch palms of genus Thrinax, the charming silver palm of the genus Cocothrinax, the cabbage palmettos, sometimes sixty feet tall, belonging to the genus Sabal, and thousands of acres of the common saw palmetto.

Of the hundreds of species of evergreen leaved trees and shrubs that make up the vegetation of this region, only one man can talk with authority. Dr. John K. Small of the New York Botanic Garden knows them as Grey knew the New England flowering plants, and when I asked him about the preservation of them he wrote me

that they should by all means be preserved from the destruction that awaits them in the event that these lands are left for the fires to sweep over them.

Let me quote from an account of Dr. Small of the Cape Sable region. It will give as accurate an idea as can be given in words, I believe, of the kind of experience a botanist may expect who ventures into the wilds there: "Once within the mangroves, our course for a distance of about six miles lay through seven creeks and seven lakes. These were completely hidden one from another, and each concealed from the traveler until he was actually upon them. The creeks were natural channels of deep water, but their courses were tortuous and progress along them was much impeded by snags, beneath on either side, and overhead. For a great part of the distance, therefore, we had either to lie down in the boats in order to save our heads or to get out and pull the boats over snags. But the lakes were beautiful, shallow, irregular bodies of crystal clear salt water. Their soft mud bottoms were almost completely covered with the most matted masses of sea weeds I had ever seen. This Brussel-carpet-like growth of sea weeds came to within about six inches of the surface of the water and was so dense as to support a man walking." (Page 11 of Dr. Small's Cape Sable Region of Florida, New York, 1919.)

Idea Is Vague

In my conversations with those who know only the northern forests I have found that as a rule they have an utterly incorrect impression of what a tropical forest is. The idea of great stretches of deeply shading giant trees is essentially incorrect and misleading, for it gives the impression that the traveler simply walks into the jungle as one would walk into a beach forest. The above description by Dr. Small is much more charactertistic of the tropical forest than most descriptions which one finds in the books of travel. If I wished to give a young boy an idea of the jungle I would send him into the hammocks of South Florida. In fact I did this with my own son, and when I took him to the rain forest of Panama he was trained in the dangers of leaving the trail too far out of sight and took to the jungles there as a duck would to water.

To those who live in the shadow of northern forests it may come as a surprise that Florida has a larger tree flora than has any other area of similar size in North

America which lies north of the Tropic of Cancer, and in fact, as Dr. Small remarks, "nearly one-half of the trees known to occur naturally in North America, north of Mexico and the West Indies, grow naturally in the relative small area of the State of Florida." That portion of Florida which jutts out into the Caribbean and which is the area we are discussing today, "possesses a tropical flora made up mostly of West Indian elements and is closely related to the floras of Bermuda, the Bahamas and Cuba."

In that incomparable report by Roland M. Harper, called Natural Resources of Southern Florida, which everyone who cares to have the facts with regard to this region about which I am talking should possess, I find a clear discussion of the interesting and in some ways unique geology of this strange region, a discussion of its peculiar soils, a masterly presentation of the much misunderstood climate, an exhaustive description of its vegetation, its peculiar fauna, together with a full discussion of its topography. In the words which I see cited in this report I note that some of the great naturalists of America have taken part in the description of the unique wild life of the region. I see there the work of the late E. A. Schwartz, than whom there never was a more noted entomologist; the late W. H. Dall, nestor of concologists; our foremost ichthyologist, David Starr Jordan, has described its fishes; the late Alexander Agassiz studied its coral reefs; Frank Chapman has described its mammals and written of its birds; Thomas Barbour has described its white-tailed deer; Oakes Ames has written extensively on its orchids; A. S. Hitchcock, the great grass specialist, has described its grasses; T. Wayland Vaughan has made more or less exhaustive studies of its mangrove swamps as so-called soil producers; the late W. E. Safford has written of the remarkable Paradise Key; Charles Sprague Sargent, the remarkable creator of the Arnold Arboretum, has described the mangrove tree, which of all places in America only occurs here in South Florida; Barton W. Evermann has described the fishes of Indian river; Paul Bartsch has written of the bird rookeries; Lieutenant Willoughby described his canoe journey of exploration across the Everglades, and the names of T. E. Layne, A. A. Eaton and others are a part of the history of this region.

These are all names of men well known by the scientific world and they are mentioned in addition to those whose names have for nearly a quarter of a century been

associated with the wild life of South Florida. Of these I have only to mention Dr. John K. Small of the New York Botanic Garden, who has written the flora of the region, Prof. Charles T. Simpson, whose work on the land snails and whose voluminous writings regarding the region are like those of John Burrows from his home on the Hudson, or John Muir from the Glaciers of the great northwest. Then there are the names of C. A. Mosier, whose name will always be associated with the great black horse flies of the region and with the trails through the hammocks, and Richard F. Deckert, one time head of the reptile house in the New York Zoological Park, who has studied its peculiar amphibians.

Region Is Unique

That it is a region of peculiar interest to the scientific world there can be no doubt. Abroad, the story of the Seminoles and the Everglades is today as firmly fixed in the imagination of the youth there as are Cooper's Leather Stocking Novels of the American Indian. And while it is true that in general the idea which the early explorers of the Glades spread abroad is no more correct than were Columbus' wild romances of the islands he first visited, the fact remains that the Everglades of South Florida represent a region which is unique among the geologic areas of the globe.

It is a flat region with no elevation that is over 100 feet. The rock is sandy limestone called Miami Oolite, and the shell marl which composes vast areas is believed to be Pleistocene, since nearly all of the shells found in it are of species still living. It is a great body of newly made land. There are evidences along its eastern border of an uplight of several feet in recent times, and at the very tip of Florida there are evidences of a recent sinking of the land. Vast areas of the land are submerged during the heavy summer rains. There are great areas of marl, almost pure calcium carbonate, whose formation is presumably due to the action of certain blue green algae, and there are many miles of beach composed exclusively of broken bits of shells and others with pure white silicious sand deposits.

Extravagant claims have been made for the fertility of those areas that are covered with a relatively thin layer of muck or peat, a layer that is nowhere more than a few feet of thickness. These soils are worthless without drainage, and drainage of the area on which torrential

tropical downpours occur is a very expensive business. Only a fraction of one per cent of the area has ever been under cultivation, and some that has been cultivated has reverted to the wild state. The muck and peat lands are deficient in potash and have recently been shown to have other peculiarities which are in a measure corrected by applications of copper sulphate. The marl coastal prairies have been shown to be deficient in manganese. That any part of the area we are discussing can be compared in any sense, so far as fertility is concerned, to the delta of the Nile has been proven to be a myth. Crops can be grown continuously if the necessary fertilizers are employed; otherwise they soon exhaust the small amounts of potash in the peat or muck.

The climate of this area is remarkable. No other area in the United States has a climate like it. During the winter months it remains practically frostless, with infrequent sudden dips in temperature to a few degrees below freezing. These winter months are months of almost continual sunshine and freedom from rain, but with a relative humidity of the atmosphere of about 80 degrees. It is the balmiest winter climate that I am familiar with after thirty years of travel and study of climates throughout the world. It is a bit of Caribbean climate near enough to the cold waves which sweep our Southern States to get some of the invigorating character which is lacking in the coastal regions of Cuba or Jamaica, and it has none of the unpleasant chilliness of the Mediterranean climate nor the harshness of the desert climates, nor the cold dampness and early morning haze of the mountain climates in the tropics. The calcareous rocky substratum has given to it that character of peculiar cheerfulness which has long been associated with limestone countries. The veteran soil chemist, Hilgard, of California, long ago remarked on the invariable influence of a limestone country upon the civilization which grows upon it. This area of South Florida possesses one of the most remarkable winter climates in the entire world. This feature forms one of its main appeals.

Temperature Figures

The maximum temperature rarely reaches 95 degrees F., and the lowest minimum, which comes at dawn and lasts for a few minutes only, is about 25 degrees F. These minima are of seldom occurrence, ten years usually elapsing between them. There is about as much

difference between the night and day temperatures in this region as there is between the winter and summer temperature.

It is a land of summer rainfall, and from December to April not over four inches of rainfall a month. The weather can be depended on in the vast majority of instances during the winter season. Sixty-five inches is the average annual rainfall.

Coming to the discussion of the vegetation, let me quote again for the benefit of those to whom the region is strange, from Charles Torrey Simpson, who, like John the Baptist, has been for twenty years crying in the wilderness; whose mission has been to point out the rapidly vanishing glories of the region and who has sincerely tried to arouse every intelligent man and woman who has come within the reach of his voice or his writings, to the terrible significance of those stirring words, "vanished forever from the planet." When one speaks of natural beauties—beauties which the fortuitous forces of nature have taken thousands of years to create—"gone forever" are ugly words. It has always seemed strange to me that they have never aroused mankind to action as have the words "damned forever." If they had we would not be begging today for the privilege of saving this southern end of Florida from the sure destruction that waits it.

Listen to these words of Charles Torrey Simpson addressed to his countrymen, residents of Florida: "We advertise the beauties and attractions of Florida; we send out agents and literature to call the people of the Northland to come and spend their winters or to be permanent residents with us. Then we destroy every vestige of its natural beauty; we cut down the hammocks, drain the lakes and mutilate the rivers. We clear out the mangrove borders which nature created to guard our shores from the destruction by sea during hurricanes, and in their places build hideous sea walls. The only attraction belonging to the state that we do not ruin is the climate, and if it were possible to can and export it we would do so until Florida would be as bleak and desolate as Labrador. What natural beauty will we have left for another generation? What right have we to waste and destroy everything that nature has lavishly bestowed on the earth?"

Technically speaking, there are in the area which we imagine would be most suitable for such a national park as we have suggested the following types of vegetation: Small areas of Miami pine land which contain many

endemic species discovered by Dr. Small; beach and sand dune vegetation, where most of the plants are truly tropical; salt flats which are the nearest approach to the so-called salt marshes of the Atlantic coast further north; cactus thickets or shore hammocks which resemble the vegetation on some of the Bahaman islands; tropical hammocks where the temperature seldom if ever goes down to freezing, and where an amazing variety of plants occur—hundreds of species, including rare and beautiful orchids. The great majority of these tropical species are evergreen and the effects produced on the visitor to them is of a true tropical jungle on a smaller scale than the jungle of the dripping rain forests. These tropical hammocks are being destroyed rapidly. Cape Sable hammocks, where the marvelously attractive old fashioned mahogany tree occurs (Swietenia mahogani), which never fails to thrill one by its charming tropical growth and immense dehiscent seed pods. Key hammocks, which are variations from the tropical hammocks and where occur the lignum vitae trees which are stunning objects when they are covered with their sky-blue flowers. The cypress ponds, great areas covered with dense growths of the pond cypress (taxodium imbricarium), whose ghostly outstretched bare branches and whose air breathing roots make during the winter season weird and to the highly imaginative person an almost terrifying impression. To me it is a thrilling sensation to trek deep into one of these great cypress swamps and leave the world of busy, noisy human beings far behind. The silence, the epyphytes, the pools of water, the ghostly tree forms and the danger of getting lost are as thrilling as are the characters of the Australian bush, where one is always in danger of getting lost and dying of thirst. The saw grass marshes of which the Everglades represent by far the largest marsh in the world, where stretches as far as the eyes can see and as flat as the western prairies, are covered with the tall saw grass (Cladium effusum) and with a collection of reeds, sedges, and forty or so species of flowering plants, make up the background against which the hammocks stand out in charming relief. Naturally there are many who see no beauty whatever in these level stretches of saw grass just as the mountain dwellers have generally scorned the level plains, but to quite as many they have an appeal that is lasting and which brings them again and again to visit them.

The Marl Prairies

The marl prairies occupy the southernmost end of the great Everglades and have a marl or finely divided limestone soil instead of a sandy one. These are of very recent geologic formation and presumably due to the action of blue green algae operating for a period of say 4,000 years. In these areas the red bay and willow and magnolia and myrtle occur, and recently these areas have been utilized extensively for tomato growing under the influence of additions of manganese sulphate. The mangrove swamps constitute the most characteristic and interesting type of vegetation of South Florida and are to be seen best in the region of the so-called Ten Thousand Islands, where some of the most gigantic mangrove trees in the world are growing. These mangrove swamps constitute, with their twenty-five or so species of plants, one of the most interesting plant associations to be seen anywhere. Nothing could be more educational to anyone interested in the behavior of plant species than this association at the very strand itself, where the sea and the land meet and where commonly the sea prevails and nothing but sand and occasional grasses occur. By sunrise, in the glare of the mid-day sun, at eventide, by moonrise, and by the pale light of the winter moon, I have seen the grostesque forms of the mangrove vegetation of South Florida, and those forms have made upon my mind impressions that never fade, impressions that have the cosmic character which we older people are always wishing might invade and influence the lives of our children. If we were to preserve only two types of the varied vegetation of the tip of Florida they should be, in my opinion, the vast mangrove swamps and the tropical hammocks through which and along the shores of which millions of American boys and girls will some day wander.

But I am a botanist and I must not forget that the majority of mankind is little interested in plants except as they form a sort of background for things that move and what they call life.

There are still left in the areas which might properly be selected for this National Park the remnants of a wild fauna which is unique on the mainland of the United States. This remnant will soon disappear if not protected and will increase and become abundant if properly safeguarded.

It includes about forty species of land animals, among which are the opossum, racoon, bear, weasel, otter, gray fox, wolf, wildcat, panther, two skunks, several bats, three squirrels, salamander, nine or ten native mice and rats, two rabbits and a deer.

Some of these have already become so rare that they may be entirely extinct. Then there are the manatees or sea cows, those amazing sea mammals whose formless bodies at one time started the myth of the mermaids and which in early Florida days formed an article of food among the crackers; and dolphins, of course, porpoises are seen more or less frequently in the sea along the coast and in the estuaries. I do not need to mention sharks and even whales and that strange sea monster (a species of whale) with bones entirely devoid of lime. Then there are the largest proportion of the seven hundred species of brilliant and fascinating fishes which inhabit the coastal waters of the region, creating, together with the tropical sea algae, undersea gardens which rival in beauty any that are to be seen in the Java sea or Bermuda, and the myriads of gar pike, that old gavoid specie which swarm in the fresh water streams.

No less an authority than Barton Evermann, now the director of the San Francisco aquarium, is on record as saying: "I regard Florida as unequaled in the richness and variety of its attractions for all sorts of sport with rod and reel."

From the fur-bearing animals of South Florida there are believed to have been marketed several hundred thousand dollars' worth of skins a year in the various markets of the state, which gives some indication of their abundance.

Of those strangest of all animals, the alligator and crocodile, which at one time were so abundant in the shallow lakes of South Florida, only a remnant remains, but this remnant is sufficiently large to insure a complete recovery, it is believed, whenever the shooting of them is stopped. To one who has never seen an alligator there is a thrill in seeing one that is out of all proportion to its characteristics. Whether it comes through the romance of its ferocity or its ugliness, I am not prepared to say. I only know that no picture of the Everglades would be any where near complete without alligators sunning themselves on the mud bank in the foreground.

Otters Trapped Frequently

The panther is a beautiful animal and is rapidly becoming very rare. The wolf may be already extinct. The bear, which appears to be distinct from the species occurring in the regions further north, is not so uncommon, and deer are still seen with considerable frequence. Otters used to be common, and I understand still are trapped frequently in South Florida.

One thinks of snakes when one sees the water covered swamps of the Everglades of South Florida, but these regions are, as a rule, too wet for the true rattlers, and one sees there generally only the black snake, the king snake, the large tree snake and the water moccasin. It is true that in the hammocks and drier regions, not only the rattler but the coral snake live, and the former is not infrequently found, but their presence is just sufficient to give a touch of possible danger to a visit to the wilder parts of the Glades. Were they a hundred times as abundant, I doubt if they would represent even then a danger greater than that of the hundreds of automobiles between which and behind which we travel thousands of miles a month in our great cities.

The hammock trees of this region are the homes of the most gorgeously beautiful and interesting legumes or tree snails to be found anywhere in the world.

I have left mention of the wild bird life to the last, for it is the disappearance of the beautiful birds which once occurred in such immense flocks that dsiturbs my peace of mind more than anything else. Their songs, their spectacular life in the air before our eyes, the beauty of their movements and the charm of their nesting life constitute one of the most remarkable and romantic characteristics of the wild life of this planet.

This region of which I speak is blessed with an abundance of the kind of food upon which some of the most spectacular of all birds of the world live. The hammocks are filled with tree snails. The shores are alive with shrimp and small fish, and the fresh water lakes are filled with minnows, while thousands of lizards are everywhere scurrying about through the tall grass without knowing that a bird from the sky can follow its every movement.

It appears to be a favorite feeding and nesting place of some of the most beautiful and some of the largest birds which are to be seen anywhere within the confines of the United States.

There are, according to H. H. Bailey, who has published recently an illustrated book on the birds of Florida, about 125 species which build nests in South Florida, and this represents about half of all the species which inhabit the whole state. Of these birds, the most interesting groups are the cranes, bitterns, herons, egrets, rails, doves, owls, woodpeckers, whippoorwills, jays and terns. The ducks, geese, sandpipers, swallows, warblers and thrushes, while visiting the area, do not nest in it.

Taking up the individual species to which an unusual interest attaches because of their spectacular appearance, perhaps there is no more interesting group of birds to be seen anywhere in the tropics than the herons. One of the most magnificent of them all is the great white heron, a species that once was present in vast multitudes in South Florida, but now has been reduced to a handful of breeding pairs. Who that have seen this wonderful bird can look with equanimity at its extinction? The snow egret, once one of the commonest birds in South Florida because of its plumes that ladies choose to wear in their headdress, has become almost extinct. Its rookeries, those marvelous nesting places of hundreds of thousands of snow-white birds which once dotted the mangrove and cypress swamps of the region, are looted every year and the old bird's plumes shipped to Cuba. The American egret, a larger bird than the snowy egret, is also of a brilliant white color. These three birds alone, because of their great beauty, are worth a determined fight for, and the children of another generation will bless us if we succeed in saving their rookeries from destruction. But to these three superb birds we should add the black crowned night heron, the spectacular wood Ibis, and the white curlew, with its scarlet beak and legs. But some of the loveliest of all the feathered wonders of South Florida seem to have almost, if not entirely, disappeared from the territory of the United States, and unless some attempt is made like that of Mr. McIlhenny at New Iberia, La., to bring them back to Florida, they will never greet the eyes of the eager public, which would be thrilled by the sight of them as a child is thrilled by a circus parade. I refer to the scarlet ibis, which, in Audubon's time, was said to be abundant, and which, as late as 1888, was seen here; the glossy ibis, now one of the scarcest water birds found in Florida; the white-faced glossy ibis, which inhabits the inland waterways, and the beautiful and striking roseat spoonbill, which used to be so abundant in the regions south of Miami

that it formed a feature of the landscape and brought forth once in my hearing the remark by no less a nature lover than the great writer of boys' stories, Kirk Munroe, that he hoped, when he passed on to go to some planet where the lovely spoonbills would gather on the beaches at sunset as they used to do in the early days of his life at Coconut Grove.

Flamingo Spectacular

Of the strangest and most spectacular of all the wading birds, and one of the most remarkable birds that inhabit this planet, the flamingo, I find it difficult to speak without some emotion. I remember poring over the illustrations of it in Wood's Natural History when I was just large enough to lie flat on its pages. I can remember how it appealed to me as one of my favorite birds of the whole great collection, ranking with the great condor that I once saw soar over my head on the Cumbre of the high Andes, and the Bird of Paradise of the Aru Islands in the Java sea, which I once had as a fellow passenger on a boat there.

The fact that this superb plumaged bird once was a frequent visitor to the country just south of where I live, and probably once upon a time nested there and is gradually fading from the shores of the Caribbean forever, fills me with a sense of sadness and apprehension lest this generation of humans, laboring under one of those great illusions such as have in the past devastated the world, will cut roads through every hammock, drain every mangrove swamp, burn up all the peat deposits, let the fires destroy all the pines and imagine that the hand of man can make a better looking world than has the hand of nature working fortuitously for millions of years and do this without retaining any of the marvelous forms of life which chance and the working of natural selection have brought into existence.

I fear, ladies and gentlemen, we are drifting towards a busier, a more comfortable, a wiser, but not a more beautiful existence, when we let the tiller swing, and fail to look ahead and see our own country as a densely built up China-like one of buildings, streets, roads, and sidewalks. "The Sidewalks of New York" was a great song, but who would care to have it become the ideal of our American children as it is perfectly possible of becoming? How many Chinese children are happy outside of the narrow streets in which they have spent their lives? How

many "Bowery" kiddies grow up with a keen appreciation of the higher beauties of landscapes?

What has all this to do with the proposal of a national park in South Florida? Just this. It is an attempt to put into your minds the facts with which our waking hours are pestered and our day dreams disturbed,—those of us in South Florida who see the trend of development there.

The veteran senator of Florida, the Honorable Duncan U. Fletcher, introduced in January a bill to authorize the Secretary of the Interior to investigate and report to Congress on the advisability and practicability of establishing a national park to be known as the Tropic Everglades National Park in the State of Florida, for the benefit and enjoyment of the people of the United States and to preserve the said area in its natural state.

Passes Both Houses

This bill has passed both houses of Congress and will, I am assured, become a law and the National Park Service will delegate some of its best men to make a survey of the areas and pick out those which they believe suitable and make their report to the forthcoming Congress, which we hope will authorize the National Park Service to receive the custody of those lands which are determined upon as suitable and make of them a national park with all that the name implies, with fire and game protection.

The national government will not purchase any of these lands in case areas within the suggested confines shall be owned privately. The state must set the necessary legislation in motion, provide for a special committee and give to it certain powers of condemnation so that in the end a clear title to all lands can be secured by the state and the whole area officially turned over unconditionally to the federal government for all time. Just what the confines of this area shall be is a technical matter which will be decided by the experts of the National Park Service who are familiar with all the difficulties of park administration.

Of one feature we feel rather confident, that the region, being perfectly flat and with splendid air conditions at all seasons over it, constitutes an ideal flying area—an area that will be easily policed and inspected quickly whenever occasions arise.

Gentlemen of the American Foresters Association, I bespeak for this proposed national park your hearty

support. It will be the only national park which is open to the tourist and weary city dwellers throughout those dreary winter months when snows and rains shut them out of the other parks. Today 175,000 people gather in the Miami region every winter; some day this number may reach a half a million, and of these, many thousands will make the tour of the Tropic Everglades and in proportion to the imagination they possess and the success with which the park there develops, carry north with them lasting sensations from its great broad stretches of saw grass and its strange mangrove lined beaches and its cocoanut planted shores, of a strange and fascinating region filled with wonderful wild life utterly unlike any other within the confines of the United States.

As spokesman for the Tropic National Park Association, the credit for whose origination should be accorded to Ernest F. Coe, whose indefatigable energy and devotion to the idea has brought the matter before the country, I attempted to get the opinions of some of the foremost thinkers of the country who were more or less familiar with the area suggested.

Without exception their responses were not only favorable, but enthusiastic, and while it would not be in good form before the investigation of the National Park Board is completed to give out these letters, I am at liberty to report that they carry the weight of an opinion which is not only critical but constructive.

I trust that my feeble presentation of facts may help those of this great association, who have heard it, to an understanding of the proposal, since it is a matter of national interest.